



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

C

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,041	09/26/2005	Estera Szwajcer Dey	0104-0505PUS1	2975
2292	7590	09/10/2007	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			PRINCE, FRED G	
PO BOX 747				
FALLS CHURCH, VA 22040-0747				
			ART UNIT	PAPER NUMBER
			1724	
			NOTIFICATION DATE	DELIVERY MODE
			09/10/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/526,041	Applicant(s) SZWAJECER DEY ET AL.	
	Examiner Fred Prince	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>0205</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7, 16 and 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claims 19 and 20, respectively, provide for the use of the method of claim 1, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 19 and 20 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

4. Claim 16 recites the limitation "agitation in the range from 0 to 180 rpm". It is wholly unclear how applicant is able to agitate the suspension at 0 rpm, i.e., no movement of the agitator. For examination purposes, the claim will be considered to recite "greater than 0 rpm to about 180 rpm". Appropriate action required.

Art Unit: 1724

5. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 7 recites the broad recitation 0.0025-5 w/w %, and the claim also recites 0.0025-2 w/w % which is the narrower statement of the range/limitation. For examination purposes, the claim will be considered to recite 0.0025-5 w/w % only. Appropriate action required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1724

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 8-10-12, 14-15 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Erickson (EP 0220647).

Erickson teaches a method for digestion of sludge in water purification, characterized by the steps: a) providing at least one enzyme mixture (page 8) capable of digesting natural polymeric materials; b) adding the at least one enzyme mixture sequentially to an aqueous sludge suspension; and thereafter, c) adding at least one species of fermenting bacteria to the suspension (page 5, lines 8-11), thereby fermenting at the recited temperature (page 6, lines 45-49) the resulting suspension obtained in step b), wherein enzymes in the at least one enzyme mixture are chosen from cellulases, amylases, lipases, pectinases, dextranases, proteases, and the natural polymeric materials are proteins, polysaccharides, and fats (page 8), wherein the enzyme mixture: sludge suspension is within the recited range (page 8, lines 6-9) dose, methane (12) is removed from the sludge suspension and the sludge is pretreated (page 5, lines 13-15, 41-47) and *Pseudomonas* species is included (page 9).

2. Claims 1, 8-9, 15 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Erickson et al. (US Pat No 4,342,650).

Erickson et al. teach providing at least one enzyme mixture (col. 11, lines 1-28) capable of digesting natural polymeric materials; b) adding the at least one enzyme mixture sequentially to an aqueous sludge suspension (Fig. 1), wherein the enzyme mixture:

Art Unit: 1724

sludge suspension is within the recited range (col. 10, lines 56-63) and the sludge suspension is at the recited temperature (col. 10, lines 37-43).

3. Claims 1-3, 10, 15 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ainsworth et al. (US Pat No 6,299,774).

Ainsworth et al. teach a method for digestion of sludge in water purification, characterized by the steps: a) providing at least one enzyme mixture (col. 5, lines 13-21) capable of digesting natural polymeric materials; b) adding the at least one enzyme mixture sequentially to an aqueous sludge suspension; and thereafter, c) adding at least one species of fermenting bacteria to the suspension (col. 4, lines 58-67; col. 5, lines 1-12), thereby fermenting at the recited temperature (col. 5, lines 45-55) the resulting suspension obtained in step b), wherein the sludge is pre-treated (col. 4, lines 14-32).

4. Claims 1-3, 10-12, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Wickham (US Pat No 5,531,898).

Wickham teaches a method for digestion of sludge in water purification, characterized by the steps: a) providing at least one enzyme mixture (abstract) capable of digesting natural polymeric materials; b) adding the at least one enzyme mixture sequentially to an aqueous sludge suspension (abstract); and thereafter, c) adding at least one species of fermenting bacteria to the suspension (abstract), thereby fermenting at the recited temperature (col. 3, lines 10-11) the resulting suspension obtained in step b), wherein the sludge is pre-treated (col. 4, lines 8-18) to achieve the recited solids concentration (col. 11, lines 48-52), wherein a *Pseudomonas* species is used to generate methane (col. 8, lines 48-56; col. 9, lines 1-8).

Art Unit: 1724

5. Claims 1-7, 15 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooney, Jr. (US Pat No 6,121,032).

Cooney, Jr. teaches providing at least one enzyme mixture (bacteria) capable of digesting natural polymeric materials; b) adding the at least one enzyme mixture sequentially to an aqueous sludge suspension (abstract), wherein the mixture contains the recited surfactant (col. 14, lines 1-21) in the recited range of sludge (col. 21, lines 20-30).

Claim Rejections - 35 USC § 103

6. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of the primary references applied above.

The primary references are described above.

Per claim13, it is well within the purview of the skilled artisan to utilize methane producing bacteria including at least one of the recited bacteria in order to, for example, degrade wastes while producing methane (see, for example, US Pat No 6,299,774 to Ainsworth).

Accordingly, it would have been readily obvious for the skilled artisan to modify the method of any one of the primary references such that it includes utilizing methane producing bacteria including at least one of the recited bacteria in order to, for example, degrade wastes while producing methane. Further, mere substitution of one known bacteria known to, for example, produce methane for another is not deemed to patentably distinguish the instant invention over the prior art.

Art Unit: 1724

Per claim 16, it is well known in the art to provide agitation within a container with the recited rpm range in order to, for example, provide for thorough, enhanced mixing of the constituents in the container (see, for examples, US Pat Nos. 5,232,596 to Castaldi and 4,566,469 to Semp et al.).

Conclusion


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References are cited of interest to show the state of art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Prince whose telephone number is (571) 272-1165. The examiner can normally be reached on Monday-Thursday, 6:30-4:00; alt. Fridays 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Fred Prince
Primary Examiner
Art Unit 1724

fgp
8/30/07